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ABSTRACT

The Houston Job Training Partnership Council's (HJTPC) Summer Basic Training Programs consisted of eight-week summer training programs at 14 sites that were provided by six organizations under contracts. Evaluation of the program involved pre-testing and post-testing at each site on achievement in reading, mathematics, and writing; pre-testing and post-testing on self-esteem and self-efficacy; and surveying participants, teachers, and program coordinators on their assessments of the programs. A total of 1,182 participants and 47 teachers completed assessment surveys. During the subsequent school year (1986-87), 1,128 HJTPC students were tracked in terms of: course grades, course proficiency test scores, performance on the Texas Educational Assessment of Minimum Skills, school attendance, and dropout rates. Comparison data were obtained on 1,128 Houston Independent School District students. Results indicate that: (1) program providers should be required to demonstrate the adequacy of their facilities; (2) a longer planning period is needed; (3) each program site should have a coordinator; and (4) a system for receiving and reviewing complaints should be established. The HJTPC programs were not particularly effective in improving the performance or attendance of participants. However, upper-level high school students were helped by the program; they were probably motivated to complete academic requirements for graduation. (TJH)

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An Evaluation of the Houston Job Training Partnership Council's Summer Basic Training Programs for Secondary Students

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Introduction

The Job Training Partnership Act (JTPA) of 1983 is the primary federally funded employment and training program in the United States (General Accounting Office, 1986). The program is administered by the U.S. Department of Labor and state governments. At the local level, JTPA programs are provided through 582 Service Delivery Areas (SDAs; General Accounting Office, 1987). The Houston Job Training Partnership Council (HJTPC) is one of three SDAs in the Houston area. In addition to federal and state authorities, the HJTPC is accountable to the Council of the City of Houston and a Private Industry Council (PIC) composed of individuals from a wide range of organizations and occupations.

A major function of the JTPA is to provide job training for disadvantaged youth. Recently, there has been an increasing emphasis in Congress on the importance of competency training in basic academic areas, as distinct from job training and placement services, for youth participating in JTPA programs. Partly for this reason, and partly for purposes of accountability, the HJTPC committed to evaluating the effectiveness of those programs providing training in academic competencies during summer 1986. The Research and Evaluation Department of the Houston Independent School District (HISD) agreed to conduct an evaluation of the summer academic programs for secondary level youth.

Methods

The eight-week summer training programs were provided by six organizations under contract with the HJTPC. Three of the programs were offered at more than one site; in all, there were fourteen sites.

Data collection during the summer involved pretesting and posttesting at each of the sites on achievement in reading, mathematics, and writing; pretesting and posttesting on self-esteem and self-efficacy; and surveying participants, teachers, and program coordinators on their assessments of the programs. Subsequently, during the 1986-87 school year, participants were tracked on the following variables: course grades, course proficiency test scores, performance on the Texas Educational Assessment of Minimum Skills (TEAMS), school attendance, and dropout rates. Identical school-year data were collected on a comparison group of HISD students matched by school, grade, gender, and ethnicity.

There were 1505 students in the sample of HJTPC participants and in the comparison group. Sample sizes varied for data analysis for a variety of reasons: a) missing data on specific variables, b) exclusion of one site from analysis of pretest/posttest achievement tests because of cheating by students on the posttests, c) exclusion of one program from analysis because of the small number who were pretested and posttested, and because school-year data were not available, d) difficulty in locating students in the school district's computerized masterfile because of missing or incorrect identification numbers, and e) absence of either pretest or posttest data from the summer, which indicated that the student may not have attended the program for the entire eight weeks.

The following discussion will address summer pretest/posttest data, student and staff assessment data, and the school-year data separately.

Pretest and Posttest Data from Summer 1986

Measures

Pretest measures were the Diagnostic Tests for TEAMS in reading, math, and writing, that previously had been constructed by the testing department in HISD to assist teachers in preparing students to take the TEAMS. The posttest measures were constructed by the testing department specifically for the HJTPC evaluation. Both sets of achievement measures were constructed to match the objectives covered on the TEAMS. These objectives are listed in the Appendix.

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to measure global self-regard at the beginning and end of the summer. To measure self-efficacy (Bandura, 1982; Shunk, 1985), items were constructed asking participants their expectations about school. They reported whether they thought they would be able to get along well with other students, attend school unless sick, get along with teachers, get a job, stay in school until graduation, do the work in school, get good grades, make friends, and learn what they need to get a job.

Results

Statistical analyses were based on matched samples of cases. Students were included who had taken both pretest and posttest on the measure being analyzed, and for whom student identification numbers could be located in

the HISD student masterfile. Analyses addressed whether the various programs and sites varied significantly from each other on the measures of achievement, self-esteem, and self-efficacy.

Two techniques were used to compare among programs and sites on the achievement measures. In the first, all pretest and posttest scores were converted to Z scores, and gains in Z scores were calculated from pretest to posttest. Analysis of variance was then used to calculate differences among the programs and sites on achievement. The second technique was analysis of covariance, which allowed for a comparison among the posttest scores of programs and sites after the scores had been adjusted for differences on the pretest.

The left side of Table 1 summarizes the outcomes of the analysis of variance on gains in Z scores, and the right side shows outcomes of the analysis of covariance. Average percents of items correct on each test at pretest and posttest are also shown.

Average scores on the measures of self-esteem and self-efficacy are shown in Table 2. Analysis of variance revealed no significant differences among programs or from pretest to posttest.

Conclusions

The standardized gain score and ANCOVA analyses did indicate statistical differences among the programs and sites, and the differences tended to be consistent across the two methods of analysis. However, the success of

Table 1

Comparison of Pretest with Posttest Achievement
Among Programs and Sites

Reading

Analysis of Variance on Standardized Gain Scores				Analysis of Covariance on Number of Items Correct					
Program	Mean Standardized Gain	Standard Deviation	N	Program	Adjusted Mean on Posttest	Observed Mean on Posttest	Mean Percent Items Correct on Pretest	Mean Percent Items Correct on Posttest	N
ELEC	.20[a]	.77	97	ELEC	26.98[a]	26.39	56	78	97
SAS	-.01[ab]	.83	169	SAS	26.26	26.24	59	77	166
SKY	-.07[ab]	.79	144	SKY	26.11[b]	27.01	63	79	143
CIS	-.14[b]	.93	146	CIS	24.14[c]	22.73	52	67	146
CT	-.39[bc]	.82	211	CT	23.60[c]	24.25	62	71	211
Site									
SAS Mt. Sinai	.25	.74	13	SAS Mt. Sinai	27.02	26.23	55	77	13
ELEC	.20[a]	.77	97	ELEC	26.89[a]	26.39	56	78	97
SAS Gethsemanie	.11	.83	28	SAS Mt. Corinth	26.75	26.89	59	79	36
SAS Immac. Conc.2	.08	.67	31	SAS Immac. Conc.2	26.30	26.26	58	77	31
CIS Dowling	.02	1.02	66	SKY	26.00	27.01	63	79	143
SAS Mt. Corinth	-.05	.99	38	SAS Immac. Conc.1	25.99	28.21	69	83	24
SKY	-.07	.79	144	SAS Gethsemanie	25.99	25.12	54	74	28
SAS Resurrection	-.13	.57	30	SAS Resurrection	24.74	24.57	58	72	30
SAS Immac. Conc.1	-.15	.65	24	CIS Dowling	24.42[b]	21.83	46	64	66
CIS Ryan	-.26	.83	80	CT AM	23.82[c]	24.82	63	73	113
CT AM	-.36[b]	.71	113	CIS Ryan	23.76	23.46	57	69	80
CT PM	-.37	1.01	63	CT PM	22.93[d]	22.43	56	66	63

Table 1 (continued)

Math

Analysis of Variance on Standardized Gain Scores				Analysis of Covariance on Number of Items Correct					
Program	Mean Standardized Gain	Standard Deviation	N	Program	Adjusted Mean on Posttest	Observed Mean on Posttest	Mean Percent Items Correct on Pretest	Mean Percent Items Correct on Posttest	N
ELEC	.00[a]	.51	94	ELEC	39.09[a]	39.03	66	75	94
CIS	-.00[a]	.90	136	SAS	38.62	40.67	72	78	171
SAS	-.15	.72	174	CIS	38.60	33.99	55	65	133
SKY	-.20	.54	148	SKY	37.42	37.75	67	73	145
CT	-.25[b]	.49	221	CT	36.64[b]	37.64	69	72	221
Site									
CIS Dowling	.23[a]	.93	58	SAS Mt. Sinai	41.14	41.69	68	80	13
SAS Mt. Sinai	.19	.61	13	CIS Dowling	40.92[a]	34.32	50	66	56
SAS Mt. Corinth	.08	.84	40	SAS Mt. Corinth	40.84	40.41	65	78	39
ELEC	.00	.51	94	ELEC	38.96[b]	39.03	66	75	94
SAS Immac. Conc.1	-.15	.47	24	SAS Immac. Conc.1	38.47	43.33	78	83	24
CIS Ryan	-.17	.84	78	SAS Resurrection	37.43[b]	41.14	75	79	29
SAS Gethsemanie	-.18	.87	29	SAS Immac. Conc.2	37.31	41.79	77	80	33
SKY	-.20	.54	148	SKY	37.28	37.75	67	73	145
SAS Resurrection	-.22	.45	29	SAS Gethsemanie	36.96	37.10	66	71	29
CT AM	-.23	.46	113	CIS Ryan	36.81[c]	33.74	59	65	77
SAS Immac. Conc.2	-.25	.49	33	CT AM	36.67[c]	37.46	68	72	113
CT PM	-.34[b]	.55	73	CT PM	35.49[c]	36.51	69	70	73

Table 1 (continued)

Writing

Analysis of Variance on Standardized Gain Scores				Analysis of Covariance on Number of Items Correct					
Program	Mean Standardized Gain	Standard Deviation	N	Program	Adjusted Mean on Posttest	Observed Mean on Posttest	Mean Percent Items Correct on Pretest	Mean Percent Items Correct on Posttest	N
SKY	.19[a]	.74	140	SKY	24.32[a]	23.80	47	53	140
ELEC	-.03	.80	93	SAS	23.32[b]	24.25	52	54	172
SAS	-.07	.77	172	ELEC	22.97[c]	22.81	48	51	93
CT	-.13[b]	.84	229	CT	22.52[c]	22.66	49	50	229
CIS	-.23[b]	.89	158	CIS	21.37[c]	20.71	46	46	158
Site									
SKY	.19[a]	.74	140	SAS Mt. Corinth	24.63[a]	25.03	50	56	37
SAS Mt. Corinth	.16	.68	37	SAS Immac. Conc. 1	24.34	27.00	57	60	27
SAS Immac. Conc. 2	.06	.69	33	SKY	24.33[b]	23.80	47	53	140
SAS Mt. Sinai	.05	.78	14	SAS Immac. Conc. 2	23.73	23.76	49	53	33
CIS Dowling	-.01	.88	70	SAS Mt. Sinai	23.55	23.36	48	52	14
ELEC	-.03	.80	93	ELEC	22.97[c]	22.81	48	51	93
SAS Immac. Conc. 1	-.06	.74	27	CIS Dowling	22.62[c]	21.46	45	48	70
CT PM	-.15	.78	78	CT AM	22.61[c]	23.22	51	52	116
CT AM	-.15	.90	116	SAS Gethsemanie	22.39	23.64	53	52*	28
SAS Gethsemanie	-.23	.78	28	CT PM	22.06[c]	21.62	47	48	78
SAS Resurrection	-.39	.88	29	SAS Resurrection	21.39	22.72	53	51*	29
CIS Ryan	-.40[b]	.86	88	CIS Ryan	20.39[c]	20.11	48	45*	88

* Posttest is lower than pretest.

Note: Means with superscripts (e.g., a, bc) achieved statistical significance at the 0.5 level or lower. Means that do not share any superscript letters are significantly different. Those that share a superscript letter are not significantly different. Mean gain scores were compared with the Scheffé multiple range test.

Table 2

Comparison of Pretest
With Posttest on Self-Esteem
and Self-Efficacy

	Self-Esteem[a]		Self-Efficacy[b]	
	Pretest	Posttest	Pretest	Posttest
Computech	38.51	39.00	13.20	13.17
ELEC	39.16	39.90	12.66	12.90
CIS	37.13	36.96	13.16	12.62
SKY	41.12	41.12	12.61	12.21
SAS	36.83	38.22	14.39	14.64

a Scores may range from 10 to 50; a higher score indicates higher self-esteem and an increase from pretest to posttest indicates increased self-esteem.

b Scores may range from 9 to 45; a lower score indicates higher self-efficacy and a decrease from pretest to posttest indicates increased self-efficacy.

programs and sites varied according to the academic content area tested, so that it is difficult to conclude that any one program or site was clearly outstanding. Overall, greater gains were made in reading and mathematics than in writing. This lower performance in writing is consistent with other studies of TEAMS scores done in HISD. The pretests and posttests were different, and there is no information available on their comparability. Nevertheless, the mean percent of items correct did improve from pretest to posttest, particularly in reading and mathematics (Table 1).

There were broad variations in achievement among sites within each of the three programs that had multiple sites, suggesting that variables related to site were important in determining performance. That is, the quality of the local management and teaching staff, the comfort of the physical setting, and the quality of implementation at a particular site may have had more to do with the achievement of participants than the use of common materials or curricula at all sites delivered by a particular of a program.

There were no consistent differences among programs or gains from pretest to posttest on the measures of self-esteem and self-efficacy. However, the measures used may not have been sufficiently sensitive to change occuring during a relatively short eight-week program.

Staff and Student Assessments

Methods

A total of 1182 participants and 47 teachers completed assessment surveys. Their responses and the responses of four program coordinators are summarized in the text below.

Results

Although there were variations among programs, between two-thirds and three-fourths of participating students found their teachers helpful, believed they had learned a lot, found the level of difficulty about right for them, and rated their programs well overall. About one-half rated their programs as well organized, while the other half believed the programs had some problems with organization. About one-half liked the programs better than regular school. Many found the facilities uncomfortable.

Overall, teachers reported problems with program administration and organization, student discipline, and some aspects of the academic program. They felt their accomplishments to be in the areas of professional growth, and the personal, social, and academic growth of students. Teachers reported receiving support from their program coordinators and staff, but many found problems in the organization of the programs. About one-half were satisfied with their facilities, the instructional materials provided in their programs, and the services received from HJTPC. Almost 20 percent found the services from HJTPC poor, their students weak in ability, their facilities poor, and their programs poorly organized.

Overall, program coordinators perceived their accomplishments to be helping students with basic skills, giving them some job experience, and assisting in their personal growth. Their major problems were with student discipline, identification of students certified for the program, delays in receipt of administrative materials from HJTPC, disorganization, and difficulties in scheduling the posttests. Problems with HJTPC dealt with frequent changes in guidelines, and delays in receipt of materials and services. Coordinators had some difficulty understanding and completing the

paperwork for HJTPC. One coordinator cited problems with students who did not speak English and others who required special education services. In general, coordinators recommended changes that have to do with program administration on the part of HJTPC.

Recommendations

Based on the survey information, several recommendations were made to HJTPC. First, program providers should be required to demonstrate that their facilities are adequate for the purposes of the program. Each provider's proposal needs to indicate a clear behavioral management system for dealing with disciplinary problems, and an assurance that teachers will be hired who have experience working with students with discipline problems. The HJTPC should streamline administrative paperwork required from the programs. A longer time for planning is needed for each program. This time should be used to coordinate the services provided by HJTPC and each contractor, to establish clear administrative and organizational guidelines, and to design and integrate program evaluation activities. There must be a coordinator for each program and site who is actively involved in the program and present at the site. Clear lines of communication must be defined within programs. The on-site coordinators should be responsible for program implementation, communication at the site, and with the program coordinator or HJTPC, implementation of guidelines, and implementation of all necessary changes. Finally, HJTPC should consider establishing a system for receiving and reviewing the complaints of teachers and students.

1986-87 School Year Follow-Up

Methods

During the 1986-87 school year, participants were tracked on the following variables:

1. course grades by semester for high school students, and for the year for middle school students,
2. course proficiency test scores on HISD's High School Proficiency Tests (HSPTs),
3. performance in the Texas Educational Assessment of Minimum Skills (TEAMS),
4. school attendance,
5. dropout rates as reported on school records.

Identical data were collected on a comparison group of students matched by school, grade, sex, and ethnicity. There were 1128 students in both the HJTPC sample and the matched sample of HISD students. Analyses compared HJTPC participants with students in the comparison group. In addition, they compared among the five summer programs.

Measures

TEAMS. The Texas Educational Assessment of Minimum Skills is taken by students in Texas in every other grade, starting in first grade. Students must pass grade 11 TEAMS in order to graduate. The grade 11 or exit-level TEAMS may be taken several times in grades 11 and 12. The exit-level test covers language arts and mathematics, and the lower level tests cover reading, writing, and mathematics. In order to pass, a student must pass all content-area subtests on the TEAMS for that year. HJTPC participants in grades 7, 9, and 11 (or 12 if they had failed) took the TEAMS.

Grades. Middle school students (grades 6-8) receive final grades at the end of the school year, and high school students (9-12) receive final semester grades. A grade of 70 is required for passing a course.

Proficiency Tests. The High School Proficiency Tests (HSPTs) were constructed by the testing department of HISD. These are criterion-referenced tests, matched to the objectives of specific high school courses. During the 1986-87 school year high school students took the HSPTs along with class finals, and test scores were averaged into the semester final course grades.

Attendance. School attendance is calculated for each student as the percent of days in attendance out of the number of days enrolled.

Dropouts. Dropout rates are very difficult to calculate in large school districts because of student mobility and associated difficulties in keeping accurate records. In HISD, campus attendance clerks record a student as a dropout if they have sufficient information that the student will not be returning to school. These reported dropouts are probably lower than the genuine dropout rate, but they were the only dropout data available on the computerized student masterfile for 1986-87.

Results

A series of t-tests on achievement variables from the preceding school year was done to determine if the HJTPC and comparison samples were comparable. Analysis of 1985-86 baseline data revealed no differences between

HJTPC and the comparison group on high school spring-semester grades in language arts or mathematics. However, there were significant differences between the middle-school samples from HJTPC and the comparson group on grades. The mean middle-school grades in language arts were 74.91 for HJTPC and 76.94 for the comparison group ($t = 2.96$; $df = 863$; $p < .01$). The mean middle-school grades in mathematics were 72.56 for the HJTPC and 74.24 for the comparison group ($t = -2.27$; $df = 933$; $p < .05$). Because of these differences at the middle school levels, analysis of covariance was used to compare HJTPC with the comparison group on course grades. T-tests on the percent of items correct on the HSPTs were used to compare the 1985-86 scores of the HJTPC and comparison groups of high school students. The groups did not differ on these baseline scores in language arts or mathematics.

The results which follow compare HJTPC participants with students in the comparison group on the school-year data. They also compare among the five summer programs.

TEAMS. Table 3 shows the performance of students on each subtest of the TEAMS. On the exit-level test, higher percentages of the HJTPC participants passed each subtest than the comparison group students, but the percents passing do not appear to be meaningfully higher for grades 7 and 9.

An analysis of covariance was conducted to compare the performance of HJTPC participants and the comparison group on total scores in each content area. The TEAMS scores were adjusted on HSPT scores for high school students and on the composite percentile score of the Iowa Test of Basic

Skills (ITBS) for middle school students. There were no significant differences between HJTPC and the comparison group at any grade level (Table 3).

Table 4 summarizes the TEAMS mastery rates for the HJTPC and comparison groups in terms of the number of students who passed all subtests on the TEAMS. The data show a significantly higher passing rate by the HJTPC participants on the exit-level test, but no meaningful differences between the two groups on the TEAMS for grades 7 and 9.

It is concluded that taking part in the HJTPC programs was associated with higher mastery rates on the TEAMS for students who took the exit-level test. Nevertheless, when adjusted scores on the TEAMS subtests are considered, HJTPC and the comparison group were not different at any grade level.

Table 3
Performance of HJTPC Participants and the
Comparison Group on the Texas Educational Assessment
of Minimum Skills (TEAMS)

Grade 11 (Exit Level)

	HJTPC		Comparison	
Percent Passing				
Language Arts	95.1%		78.8%	
Mathematics	94.0%		76.1%	
		(Adjusted)*		(Adjusted)*
Total Scores				
Language Arts [a]	58.1	(58.31)	55.4	(57.27)
Mathematics [b]	54.5	(58.59)	47.9	(56.85)
Sample Size				
Language Arts	81	(71)	66	(45)
Mathematics	83	(48)	67	(23)

Grades 7 and 9

	HJTPC		Comparison	
Percent Passing				
Reading	65.0%		64.9%	
Writing	53.1%		51.4%	
Mathematics	70.7%		70.9%	
		(Adjusted)**		(Adjusted)**
Total Scores				
Reading [c]	31.0	(32.32)	31.0	(31.73)
Writing [d]	19.1	(19.79)	19.1	(19.47)
Mathematics [e]	29.6	(31.54)	30.3	(31.07)
Sample Size				
Reading	412	(290)	367	(203)
Writing	405	(286)	358	(199)
Mathematics	410	(288)	361	(202)

[a] total items = 72; passing score = 50
[b] total items = 72; passing score = 39
[c] grade 7: total items = 40; passing score = 26
grade 9: total items = 44; passing score = 30
[d] total items = 24; passing score = 16 (grade 7), 19 (grade 9)
[e] total items = 44; passing score = 26

* Scores adjusted using ANCOVA on percent correct on HSPT
** Scores adjusted using ANCOVA on ITBS composite percentile score

Table 4
Mastery Rates on the Texas Educational Assessment of Minimum Skills (TEAMS)

	Grade 11		Grades 7 and 9	
	HJTPC	Comparison	HJTPC	Comparison
Number	73	42	156	144
Percent Achieving Mastery	87.6% *	60.0%	36.9%	38.7%

Note: To achieve mastery, a student must pass all subtests on the TEAMS: subtests for grades 7 and 9 are Reading, Writing, Mathematics; subtests for grades 11 or 12 Language Arts and Mathematics.

* Total percent for HJTPC grades 11 or 12 significantly higher than other total percents: Chi square = 4.19; df = 1; $p < .05$.

Grades. The final 1986-87 grades for middle school students in the HJTPC and comparison groups were adjusted on grades from the previous year. Analysis of covariance showed no differences between the groups in the adjusted final grades in mathematics, and a small but significant difference favoring the comparison group in language arts (Table 5).

The two high school groups were comparable according to baseline data, so analysis of variance was used for analysis of course grades. The fall 1986 and spring 1987 grades in language arts and mathematics were compared. No significant differences were found (Table 6).

Table 5
Final Adjusted* Course Grades of Middle School Students

	HJTPC	Comparison
Language Arts		
Average Grade	73.78	75.39**
Sample Size	229	184
Mathematics		
Average Grade	74.06	73.83
Sample Size	253	200

* Grades were adjusted using ANCOVA to control for initial difference between HJTPC and the comparison group. Covariates were grades from 1985-86 in the same content area.

** Comparison group was higher: $F = 4.20$; $df = 1$; $p < .05$.

Table 6
Final Course Grades of High School Students

	Fall 1986		Spring 1987	
	HJTPC	Comparison	HJTPC	Comparison
Language Arts				
Average Grade	75.47	74.39	75.22	74.98
Sample Size	609	464	559	453
Standard Deviation	9.92	10.73	10.20	10.98
Mathematics				
Average Grade	74.54	73.48	74.02	73.47
Sample Size	592	483	558	473
Standard Deviation	10.77	11.88	11.80	11.67

Proficiency Tests. Once it was determined that HJTPC and the comparison group were comparable on baseline data, t-tests were used for analysis. There were no statistically significant differences between HJTPC and the comparison group in fall or spring semesters on proficiency tests in language arts or mathematics. Table 7 summarizes these outcomes.

Table 7
Performance on the High School
Proficiency Tests (HSPTs)

	Fall 1986		Spring 1987	
	HJTPC	Comparison	HJTPC	Comparison
Language Arts				
Percent of Items Correct	67.01	65.74	67.42	68.52
Sample Size	536	402	541	447
Standard Deviation	13.74	15.47	14.24	14.96
Mathematics				
Percent of Items Correct	59.41	60.14	60.15	58.21
Sample Size	444	339	492	419
Standard Deviation	19.66	20.09	17.78	17.95

Attendance. Overall, HJTPC showed a significantly higher attendance rate than the comparison group (Table 8). This outcome should be interpreted with some caution since the effect size is small: the overall difference is only about two days. Secondly, the outcome can be attributed partly to the low attendance rate of the SKY comparison sample. Despite this cautious interpretation, the HJTPC programs, except for CIS, were consistently higher in school attendance than their comparison groups.

Table 8
Rates of 1986-87 School Attendance for
All Groups and Overall

	HJTPC	Comparison
Computech	91.0%	90.6%
Sample Size	252	238
ELEC	91.9%	90.0%
Sample Size	95	100
SKY	91.9%	87.0%
Sample Size	162	153
CIS	91.3%	91.7%
Sample Size	234	231
SAS	91.2%	90.5%
Sample Size	260	266
Total	91.4% *	90.2%
Sample Size	1003	988
Standard Deviation	11.43	12.90

* HJTPC was significantly higher than the comparison group in attendance: $F = 4.31$; $df = 1$; $p < .05$. There were no statistical differences among HJTPC programs.

Dropouts. A total of 28 students or 2.5 percent of the HJTPC school-year sample were recorded as dropouts in 1986-87. By comparison, 67 students or 5.9 percent of the comparison school-year sample were recorded as dropouts. Even though this may be a meaningful outcome, the size of the effect is so low that it is difficult to interpret.

Conclusions

Among students in grades 11 and 12 who took the exit-level TEAMS, mastery rates were higher than in the comparison group. This difference between the groups on TEAMS performance did not occur for students in grades seven or nine, nor did it occur when the test scores were adjusted on previous test performance. There was a small but significant effect favoring HJTPC on school attendance. There were also fewer dropouts among the HJTPC participants. These outcomes suggest that participation in the HJTPC program may have been associated with attending and staying in school. Alternatively, HJTPC participants may have been motivated to attend school, as evidenced by their completing the summer program.

There were no consistent differences among the five programs on the school-year data, suggesting that the programs used similar instructional techniques. It appears that they were all about the same: classrooms with teachers hired for the summer, teaching basic skills in seemingly conventional ways.

Conclusions and Discussion

Outcomes of the Evaluation

An essential evaluation question for this project is whether the HJTPC summer programs were successful in improving academic skills and school attendance among participants. There were positive effects on these variables, but the outcomes were not consistent. From pretest to posttest during the summer, participants gained in the percent of items correct on

tests in reading and mathematics. However, the tests were not known to be comparable in dificulty or content, so that real gains in achievement are not clear. During the school year, participants in grades 11 and 12 showed significantly greater mastery, defined as passing all subtests, on the state TEAMS than students in the comparison group. However, the participants were not significantly more successful than comparison students on the subtests of the TEAMS when scores had been adjusted on other school performance variables. HJTPC participants did attend school significantly more days during the school year following the summer program. Nevertheless, the effect size of two days that produced this significant outcome is very small. Finally, over twice as many comparison students were recorded as school dropouts than participants during the 1986-87 school year. At the same time, the number of recorded dropouts was small in both cases and the difference between the groups represents only about 3.5 percentage points.

A plausible alternative explanation for the school-year outcomes is that the participant and comparison groups were different, despite careful matching on appropriate variables. Participants were unique in that they were willing and motivated to attend summer school for eight weeks. Of course, they were paid minimum wage to attend, but it is likely that they were more motivated than their peers to achieve success given that they sought out and applied for the programs and attended the sometimes hot and uncomfortable facilities.

For these reasons, and with major one exception, the conclusion of the study is that the HJTPC summer programs were not clearly successful in producing effects on the variables measured. It may be, of course, that

the programs will have a long-term and positive influence on participants when they come to decision points about completing school or seeking employment.

One important exception to the conclusion stated above has to do with the performance of exit-level 11th and 12th grade students on the TEAMS. Their mastery levels were meaningfully higher than those of comparison students, and it is concluded that the HJTPC programs were effective in helping these students pass the TEAMS. There are several reasons for this positive conclusion. First of all, scores of these students on the TEAMS subtests were higher, even though they did not reach significance in the analysis of covariance. (Table 3). The summer programs did assist them to gain the additional skills needed to pass the TEAMS and achieve a significant step forward graduation. A second reason for the positive conclusion is that previous evaluations of other summer TEAMS preparation programs for high school students in HISD have shown positive outcomes. Programs providing training for the TEAMS could be expected to be successful. Finally it appears that the HJTPC summer programs were particularly appropriate and helpful for 11th and 12th grade students who were motivated to study during the summer to pass the TEAMS and go on to graduation. It is not known if HJTPC created motivation for success in students, but it appears to have taken good advantage of the motivation that already existed.

To summarize, the general conclusion from the evaluation is that the HJTPC programs were not particularly effective in improving the performance or attendance of participating students. The exception is that upper-level high school students, who were probably motivated to complete academic requirements for graduation, were helped by the programs.

The evaluation described included observations of the summer classes during posttesting only. Process data were composed of staff and student assessments. Though limited, this information does give an idea of the quality of the summer programs. Assessments indicated a need for more thorough planning, coordination, and administration of programs by the providers and HJTPC. Brief on-site observations revealed apparently standard approaches to curriculum and instruction. In many cases, the instructors were teachers hired for summer work. There was no evidence of special training for teachers or special curricula to address the requirements of remedial education for disadvantaged and low-performing students. In other words, the summer programs did not appear to be particularly innovative. Obviously, any definite conclusions about the quality of the programs can not be made, but there was an indication that the programs could have been administered more effectively, and could have addressed more carefully the needs of remedial students.

Utilization of the Evaluation

A major issue in the evaluation of the HJTPC summer programs was the purpose of the research. The research was designed to determine program effectiveness in terms of student performance and school attendance, and provide information to HJTPC on student and staff assessments. It was intended to compare the various program providers and assist HJTPC in

making decisions about subsequent contracts to program providers. As it turned out, there were other expectations by HJTPC and program providers, and some of these expectations were not met. For example, some of the program providers requested information on the TEAMS performance of individual students. Such data are confidential and could not be provided. Some of the contractors were to be paid additional money depending on the number of their participants who passed TEAMS. However, given our best effort, the data still contained missing data on some of the participants. HJTPC wanted to use evaluation outcomes for public relations purposes, but the data were not sufficiently clear-cut for that purpose. The format of the reports to HJTPC was too technical in some cases; data needed to be prepared so that members of the Houston City Council and representatives of private industry could grasp its meaning easily. A simple presentation of complex data was difficult without belying the meaning of the outcomes. Finally, the two public agencies, HJTPC and the school district, have internal organizational procedures and requirements that made it very difficult to achieve flexible, responsive, and efficient approaches to problems in the evaluation as they arose.

Despite these problems, the importance of this kind of evaluation remains. JTPA provides a great deal of money for basic skills training, and program effectiveness must be measured. Our society's disadvantaged depend on receiving training like that provided by JTPA to assist them in finding and maintaining jobs. Ideally, evaluation will contribute to the success of such programs.

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Appendix

Objectives Included in the Pretests and Posttests

Reading Objectives

1. Determine sequence of events
2. Follow written directions
3. Use parts of a book as aids in locating information
4. Use books as aids in locating information
5. Use graphic sources to get information
6. Use context to understand the meaning of words
7. Use structure of a word to derive meaning
8. Recognize and interpret figurative language
9. Identify main idea
10. Develop generalizations from details
11. Recognize like and unlike relationships
12. Perceive cause-effect relationships
13. Draw logical conclusions
14. Predict future actions or outcomes
15. Explain and relate to feelings of characters
16. Make judgments on the basis of information
17. Distinguish between fact and opinion

Math Objectives

1. Add whole numbers
2. Subtract whole numbers
3. Multiply whole numbers
4. Divide whole numbers
5. Charts and graphs
6. Averages
7. Compare fractions and mixed numbers
8. Add fractions and mixed numbers
9. Subtract fractions and mixed numbers
10. Multiply fractions and mixed numbers
11. Divide fractions and mixed numbers
12. Compare two numbers
13. Round decimals and whole numbers
14. Add decimals/word problems
15. Subtract decimals/word problems
16. Multiply decimals/word problems
17. Divide decimals/word problems
18. Identify equivalents
19. Solve money problems
20. Find a given percent
21. Find the base or rate
22. Solve the equation
23. Standard numerals and powers
24. Choose metric unit
25. Convert units of measure
26. Scale drawings/Map reading

Appendix (cont.)

Writing Objectives

1. Demonstrate knowledge of capitalization
2. Demonstrate knowledge of punctuation
3. Recognize the correct spelling
4. Demonstrate knowledge of correct English usage
5. Demonstrate the ability to recognize fragments and/or run-ons
6. Recognize sentence that best combines two related sentences
7. Demonstrate the ability to proofread